

Grizzly **Industrial, Inc.**®

MODEL H8214 AIR BODY SAW INSTRUCTION MANUAL



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#JM9871 PRINTED IN CHINA

 **WARNING!**

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

 **WARNING!**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

SAFETY

WARNING

For Your Own Safety Read Instruction Manual Before Operating This Equipment

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment.

WARNING

Safety Instructions for Pneumatic Tools

- 1. READ THIS MANUAL.** This tool may cause personal injury if used incorrectly. This manual contains proper safety and operating instructions that must be followed to reduce this risk.
- 2. WEAR EYE PROTECTION.** This tool may throw small fragments during operation, which may cause serious eye injury. Always wear ANSI approved safety glasses or face shield to reduce your risk from this hazard.
- 3. WEAR A RESPIRATOR.** This tool may produce fine dust during operation, which can cause respiratory injury if inhaled. Always wear a respirator NIOSH approved for the type of material being processed.
- 4. WEAR HEARING PROTECTION.** Operating this tool for prolonged time periods may damage your hearing. Your risk depends on length and frequency of use. To reduce your risk of this hazard, wear hearing protection.
- 5. MAINTAIN SAFETY GUARDS.** Your tool may be equipped with safety guards or other structural components designed to reduce the risk of injury during operation. Never modify or operate this tool with any guards or components removed or damaged.
- 6. KEEP CHILDREN AWAY.** Prevent children from injury by keeping them away from this tool. Disconnect and lock the tool away when not in use.

7. **AVOID ENTANGLEMENTS.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry, which may get caught in moving parts, when operating this tool. Wear a protective hair covering to contain long hair.
8. **USE CORRECT AIR PRESSURE.** Exceeding the maximum PSI rating of this tool may cause unpredictable operation or bursting.
9. **DISCONNECT AIR PRESSURE** before servicing, changing accessories, or moving to another location. Never leave this tool unattended when connected to air.
10. **SECURE TOOLING.** Always verify tooling is secure before operation.
11. **SHARP SURFACES.** DO NOT place hands near the tooling surfaces when in operation.
12. **REMOVE ADJUSTING KEYS AND WRENCHES AFTER USE.** These tools become dangerous projectiles if left on the tool when it is started.
13. **AVOID FLAMMABLES.** Do not use this tool around any flammables that may be ignited by sparks.
14. **SECURE WORK.** Use clamps or a vise to hold work when practical. It is safer than using your hand and frees both hands to operate tool.
15. **MAINTAIN TOOLS WITH CARE.** Keep tools lubricated and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DO NOT FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
17. **CHECK FOR DAMAGED PARTS BEFORE USING.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect operation. Repair or replace damaged parts before operating.
18. **USE GOOD LIGHTING.** Keep work area well lighted. Dark work areas increase risk of accidental injury.
19. **AVOID UNINTENTIONAL OPERATION.** Always disconnect air when not in use, and do not carry tool with hand on trigger.
20. **USE THE RECOMMENDED ACCESSORIES.** Consult owner's manual for recommended accessories. Using improper accessories may increase the risk of injury.
21. **NEVER ALLOW UNTRAINED USERS TO USE THIS TOOL WHILE UNSUPERVISED.**
22. **IF YOU ARE UNSURE OF THE INTENDED OPERATION, STOP USING TOOL.** Seek formal training or research books or magazines that specialize in pneumatic tools.
23. **BE AWARE OF HOSE LOCATION.** Hoses can easily become a tripping hazard when laid across the floor in a disorganized fashion.
24. **DO NOT USE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL, OR WHEN TIRED.**

CAUTION

No list of safety guidelines is complete, because every work environment is different. Always consider safety first and use common sense. Failure to use this tool with caution and respect could result in serious personal injury.

INTRODUCTION

Foreword

The specifications, details, and photographs in this manual represent the Model H8214 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly.

If you have any comments regarding this manual, please write to us at the following address:

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Most importantly, we stand behind our tools. If you have any service questions or parts requests, please call or write us at the location listed below.

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Specifications

Cuts per Minute.....5000 CPM
No Load Speed.....5000 RPM
Air Consumption.....2 CFM
Air Inlet.....1/4"
Required PSI.....90 PSI
Maximum PSI.....120 PSI
Maximum Sound Level.....108 dB
Weight.....1.6 Lbs

Inventory

| H8214 Inventory | Qty |
|------------------------------------------|--------|
| A. Tool Oil Bottle..... | 1 |
| B. Air Body Saw..... | 1 |
| C. 1/4" NPT Male Quick Connect Fitting.. | 1 |
| D. Saw Blades..... | 2 |
| E. Hex Wrenches (1.5mm, 3mm)... | 1 each |

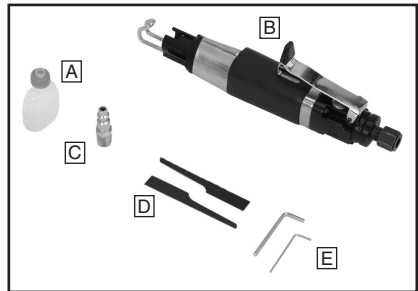
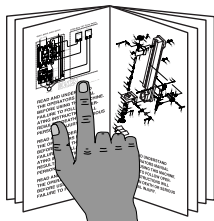


Figure 1. Model H8214 Inventory.

OPERATIONS

WARNING



Read the manual before operation. Become familiar with this tool, its safety instructions, and its operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.

WARNING

Like all tools there is potential danger when operating this tool. Accidents are frequently caused by lack of familiarity or failure to pay attention. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

To install a blade:

1. DISCONNECT THE SAW FROM THE AIR SUPPLY!
2. Use the 3mm hex wrench to loosen the blade set screws located on both sides of the blade arbor (**Figure 2**).

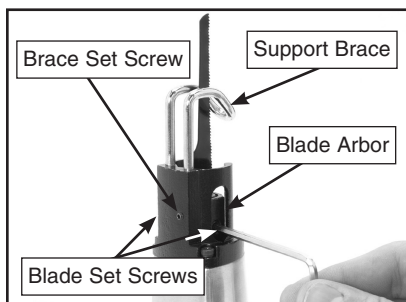


Figure 2. Tightening the set screws.

3. Insert the blade fully into the blade arbor.
4. Re-tighten the set screws. Verify that the blade is secure and will not pull out.

Note: Tighten both set screws with even pressure against the blade or the blade may come loose.

To adjust the support brace:

1. DISCONNECT THE SAW FROM THE AIR SUPPLY!
2. Use the 1.5mm hex wrench to loosen the set screw located on the back of the safety set (**Figure 2**).
3. Adjust the support brace to the desired depth.

Note: Make sure that the brace is not over-extended or else it will not be able to be secured with the set screw and may come loose.

4. Re-tighten the set screw. Verify that the support brace will not pull out.

Using the Air Body Saw

Always test the blade on a scrap piece of material similar to the workpiece. Trial and error is the best way to determine the ideal cutting speed, feed rate, and depth of cut.

To use the saw:

1. Adjust the support brace for blade clearance under the workpiece.
2. Attach the 1/4" NPT male quick connect fitting to the air inlet plug.
3. Attach the saw to an air supply set at 90 PSI.
4. Hold the saw securely with both hands, and rest the support brace on the workpiece.
5. Using the trigger to control RPM, start the saw, then ease the blade against the workpiece with a light, but steady, pressure.



Daily Maintenance

The air body saw **MUST** have 2-6 drops of oil directly dropped into the air fitting before each use. In addition, we recommend using an in-line filter, lubricator, and regulator, as shown in **Figure 3**.

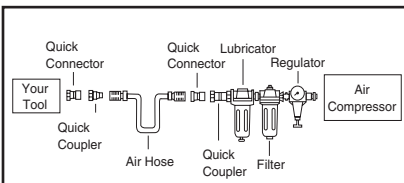


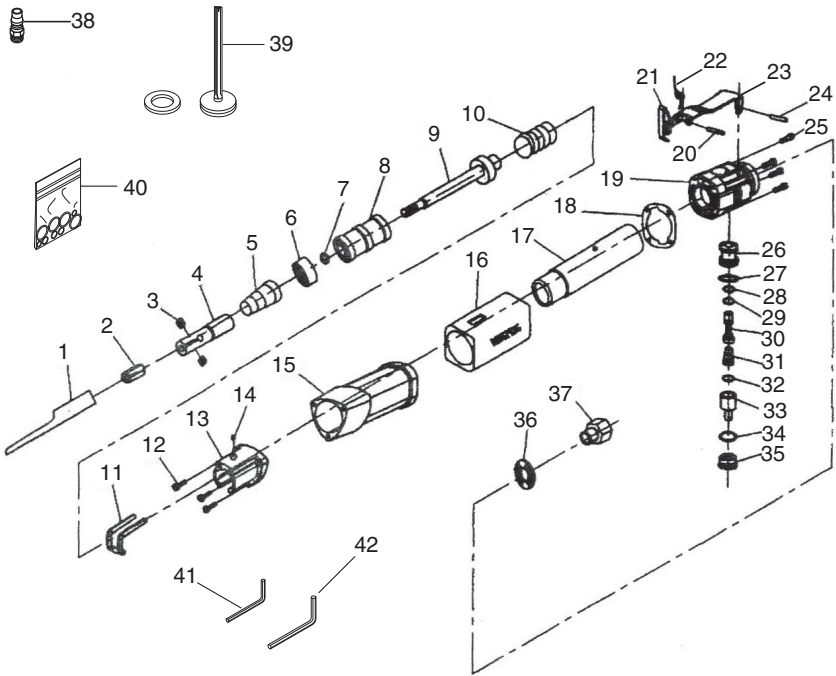
Figure 3. Installed filter lubricator regulator.

| | |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| ! WARNING | |
|  | EYE INJURY HAZARD! Wear protective equipment when using this tool. |
|  | ACCIDENTAL START HAZARD! Disconnect before service or tool changes. |
|  | AIR PRESSURE HAZARD! Never exceed 120 PSI. |
|  | LUNG/EAR INJURY HAZARD! Wear protective equipment when using this tool. |

These procedures should be done after each use:

- Wipe the motor housing and blade with a dry cloth, or blow off the dust and debris with compressed air.
- Check for damage to tooling, hoses, housing or other accessories.
- Relubricate internal parts with 2-6 drops of oil prior to storage.

H8214 PARTS LIST



| REF | PART # | DESCRIPTION |
|-----|-----------|----------------------|
| 1 | PH8214001 | BLADE |
| 2 | PH8214002 | BEARING HOUSING |
| 3 | PSS03M | SET SCREW M6-1 X 8 |
| 4 | PH8214004 | BLADE CHUCK |
| 5 | PH8214005 | COMPRESSION SPRING |
| 6 | PH8214006 | CYLINDER CAP |
| 7 | PORP009 | O-RING 8.8 X 1.9 P9 |
| 8 | PH8214008 | PISTON |
| 9 | PH8214009 | PISTON BLADE |
| 10 | PH8214010 | COMPRSSION SPRING |
| 11 | PH8214011 | SAFETY NOZZLE |
| 12 | PSB164M | CAP SCREW M3-.5 X 12 |
| 13 | PH8214013 | SAFETY SET |
| 14 | PSS97M | SET SCREW M3-.5 X 4 |
| 15 | PH8214015 | HOUSING |
| 16 | PH8214016 | RUBBER GRIP |
| 17 | PH8214017 | CYLINDER |
| 18 | PH8214018 | GASKET |
| 19 | PH8214019 | END CAP |
| 20 | PRP11M | ROLL PIN 2.5 X 16 |
| 21 | PH8214021 | TRIGGER PIN |

| REF | PART # | DESCRIPTION |
|-----|-----------|--------------------------|
| 22 | PH8214022 | TORSION SPRING |
| 23 | PH8214023 | TRIGGER |
| 24 | PRP43M | ROLL PIN 3 X 22 |
| 25 | PSB165M | CAP SCREW M3-.5 X 18 |
| 26 | PH8214026 | VALVE STEM SEAT |
| 27 | POR0012 | O-RING 12 X 2.4 |
| 28 | PORS004 | O-RING 3.5 X 1.5 S4 |
| 29 | POR0004 | O-RING 4 X 2 |
| 30 | PH8214030 | VALVE STEM |
| 31 | PH8214031 | COMPRESSION SPRING |
| 32 | PORP005 | O-RING 4.8 X 1.9 P5 |
| 33 | PH8214033 | VALVE STEM HOUSING |
| 34 | PORP011-2 | O-RING 11 X 2.4 P11.2 |
| 35 | PH8214035 | SCREW CAP |
| 36 | PH8214036 | SPECIAL WASHER |
| 37 | PH8214037 | AIR INLET PLUG |
| 38 | PH8214038 | 1/4 NPT MALE AIR FITTING |
| 39 | PH8214039 | PISTON REPAIR KIT |
| 40 | PH8214040 | O-RING REPAIR KIT |
| 41 | PAW01.5M | HEX WRENCH 1.5MM |
| 42 | PAW03M | HEX WRENCH 3MM |